

## **REMARKS**

At the time of the Official Action dated June 2, 2004, claims 1-3, 5-11, 13-17 and 19-25 were pending. In the present response, claim 22 has been cancelled and claims 20 and 23 have been amended. Accordingly, claims 1-3, 5-11, 13-17, 19-21 and 23-25 remain currently pending.

In the Office Action, claims 15 and 19 were rejected under 35 U.S.C. 35 § 102(e) based on U.S. Patent No. 6,285,350 to Ijntema et al. ("the Ijntema reference"). Claims 20-25 were rejected under 35 U.S.C. 35 § 102(b) based on U.S. Patent No. 5,489,996 to Oku et al. ("the Oku reference"). Additionally, claims 1-2, 5, 7-9 and 14 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Oku. Claims 3 and 11 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Oku and U.S. Patent Application No. 2002/0085015 to Wilt et al. ("the Wilt reference"). Claims 6 and 10 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Oku and U.S. Patent Application No. 2002/0161803 to Shelton ("the Shelton reference"). Claim 16 was rejected under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Shelton, while claim 17 was rejected under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Wilt. Each of these rejections is addressed in detail below.

### **Rejection Under 35 U.S.C. § 102 based on Ijntema**

As set forth above, claims 15 and 19 were rejected under 35 U.S.C. § 102(e) as being anticipated by on the Ijntema reference. Specifically, with regard to independent claim 15, the Examiner stated:

As per claims 15, Ijntema et al., hereinafter Ijntema, discloses a hardware-implemented method of color video data correction filtering, comprising the steps of:

gamma decompensating input color video data referenced to a non-linear color space (“To fully compensate the color errors, the RGB signals have to be linearized by compensating for the gamma correction applied in the camera”, column 2, line 31-33);

compensating for color point data of a plurality of constituent colors of a color monitor by applying a plurality of pre-calculated gamut shifting arrays corresponding to the color point data, each of the plurality of pre-calculated gamut shifting arrays corresponding to a multiplication look-up table (MLUT) comprising pre-calculated values that represent specific multiplication operations (“a transformation of the RGB signals with a 3x3 matrix can be done”, column2, line 34, since a matrix operation includes both multiplication and addition operations, it represents a specific multiplication operation); and

compensating the color point data after application of the plurality of pre-calculated gamut shifting arrays for non-linearities of the color monitor by applying a plurality of non-linearization tables to the color point data to produce output color video data compensated for non-linearities and color points of the color monitor (“Finally, the gamma correction has to be applied again”, column2, line36; “The characteristics could be stored in a LUT”, column 2, line 59).

Official Action, pages 2-3.

Further, in the “Response to Arguments” section, the Examiner stated:

As per claim 15 and 19, applicant alleges Ijntema does not disclose the use of a plurality of pre-calculated gamut shifting arrays corresponding to a multiplication look-up table (MLUT) comprising pre-calculated values that represent specific multiplication operations. In reply, examiner considers a 3x3 matrix is the gamut shifting array used to compensate for color point data and the LUT storing the characteristics (column 2, line 59) the non-linearization table, and since a matrix operation includes both multiplication and addition operations, it represents a specific multiplication operation.

As per claims 1-14 and 16-18, applicant alleges since Ijntema does not satisfy limitations as discussed above, therefore, 35 U.S.C. 103 rejection is defective. In reply, examiner considers Ijntema satisfies claimed limitations.

Official Action, page 15.

The Applicant respectfully traverses these rejections. Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). In order to maintain a proper rejection under section 102, a single reference must teach each and every element or step of the rejected claim, else the reference falls under section 103. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984).

Additionally, if the Examiner relies on a theory of inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *See In re Robertson*, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999). The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient. *See id.* In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or sound and supportable technical reasoning to support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. *See Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (B.P.A.I. 1990). The Examiner, in presenting the inherency argument, bears the evidentiary burden and must adequately satisfy this burden. *See id.* Regarding functional limitations, the Examiner must evaluate and consider the functional limitation, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. *See M.P.E.P.* § 2173.05(g); *In re Swinehart*, 169 U.S.P.Q. 226, 229 (C.C.P.A. 1971); *In re Schreiber*, 44 U.S.P.Q.2d 1429, 1432 (Fed. Cir. 1997). If the Examiner believes the functional limitation to

be inherent in the cited reference, then the Examiner “must provide some evidence or scientific reasoning to establish the reasonableness of the examiner’s belief that the functional limitation is an inherent characteristic of the prior art.” *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (B.P.A.I. 1986).

Independent claim 15 recites utilizing “a plurality of pre-calculated gamut shifting arrays to the color point data, each of the plurality of pre-calculated gamut shifting arrays corresponding to a *multiplication look-up table (MLUT) comprising pre-calculated values that represent specific multiplication operations.*” (Emphasis added). The Ijntema reference does not disclose or suggest at least this recited feature.

The Ijntema reference describes an apparatus for compensating for color deviations. See Ijntema, col. 1, lines 50-54. This system compensates by utilizing gamma correction, as set forth in the following passage:

To fully compensate the color errors, the RGB signals have to be linearized by compensating for the gamma correction applied in the camera (i.e.,  $R^\lambda$ , etc.). Then, a transformation of the RGB signals with a 3x3 matrix can be done. Finally, the gamma correction has to be applied again (i.e.,  $R^{1/\lambda}$ , etc.). The matrix coefficients depend on the panel transmission.

A digital implementation in a programmable video signal processor (VSP) has been used to prove the feasibility of the concept. The main task of the VSP is to amplify the digitized RGB signals by a constant factor in such a way that the white point is always correct for various transmissivities of the panel. The characteristics of the panel were measured for 5 different applied voltages. For voltages which are not measured, the characteristics were simply interpolated. A PC computed the correct white point settings as function of the applied voltage, and modified the amplification factors in the VSP. The transmissivity of the panel was adjusted as function of the ambient light. The ambient light was measured with a photodiode with a sensitivity close to the eye-sensitivity. The relation between the ambient illumination and the transmission of the

panel was non-linear. The results were promising.

A cheaper solution can be obtained by using analog RGB amplifiers with adjustable gains or by using a customized digital implementation. The gains are changed as function of the applied voltage (transmissivity) of the panel. The characteristics could be stored in a LUT.

Ijntema, col. 2 lines 31-59.

Accordingly, in this passage, the Ijntema reference describes compensating for the color errors in a camera. Specifically, Ijntema transforms the RGB signals by applying a 3x3 matrix. *See id.* at col. 2, lines 34-35. Once the 3x3 matrix is applied, gamma correction is applied again to the transformed signals.

In the present case, Ijntema fails to anticipate claims 15 and 19 because Ijntema does not disclose all of the elements set forth in those claims. For instance, the Ijntema reference does not disclose the use of “a plurality of pre-calculated gamut shifting arrays to the color point data, each of the plurality of pre-calculated gamut shifting arrays corresponding to a *multiplication look-up table (MLUT) comprising pre-calculated values that represent specific multiplication operations,*” as recited in claim 15. (Emphasis added). Hence, because Ijntema fails to disclose, explicitly or inherently, all of the claimed subject matter, the reference cannot anticipate the claims.

To begin, the “multiplication look-up table (MLUT),” as recited in claim 15, is not explicitly disclosed or inherently found in the Ijntema reference. In the rejection, the Examiner asserted that the 3x3 matrix of Ijntema corresponds to the “gamut shifting array” of the present claims. Further, the Examiner stated that “since a matrix operation includes both multiplication and addition operations, it represents a specific multiplication operation,”

which appears to imply that multiplication operations are inherent. However, Ijntema does not teach, suggest or illustrate the use of MLUTs, much less, storing pre-calculated values that represent specific multiplication operations. In fact, Ijntema is completely silent with respect to the calculation of the values in its look up tables. As such, the Ijntema reference does not explicitly disclose the “multiplication look-up table (MLUT),” as recited in claim 15.

Further, the Examiner’s rejection does not provide a basis in fact and/or sound and supportable technical reasoning to support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the Ijntema reference. As a result, the Examiner has not satisfied the burden required by the binding precedents cited above. As noted above, the Ijntema reference is completely silent regarding multiplication operations, much less, multiplication look-up tables, and nothing in the Ijntema reference suggests the necessity of such multiplication look-up tables. Accordingly, the “multiplication look-up table (MLUT),” as recited in claim 15, is not inherently found in the Ijntema reference.

For at least these reasons, Ijntema cannot anticipate independent claim 15 and dependent claim 19 under existing law. Accordingly, the Applicant respectfully requests withdrawal of the rejection of claims 15 and 19 under Section 102 based on Ijntema.

**Rejection Under 35 U.S.C. § 102 based on Oku**

As set forth above, claims 20-25 were rejected under 35 U.S.C. § 102(b) as being anticipated by the Oku reference. Specifically, with regard to independent claim 20, the Examiner stated:

As per claim 20, Oku et al, hereinafter Oku, discloses a color correction system, comprising:

a color filter that receives image data and produces color video data (Figure 5 37 the First Color Correction Unit is considered a color filter because it “normalizes input image signals and converts them to the data signals in a region suitable for the color adjustment for the input image signals, and makes the color adjustment”, column 6, line 59-62);

a color point correction system that receives the color video data and produces color point corrected video data (Figure 5 44 the 2<sup>nd</sup> Color Correction Unit); and

a non-linearity correction system that receives the color point corrected video data and produces non-linearity corrected video data (Figure 5 48 3<sup>rd</sup> Color Correction Unit which compensates for the non-uniformity of recording materials).

...

As per claim 22, Oku demonstrated all the elements as applied to the rejection of independent claim 20, supra, and further discloses a plurality of multiplication look-up tables (MLUTs) (“The input data normalizing unit 56 receives the image data from the host computer, and converts them into R, G, and B data each consisting of eight bits, through graduation converting tables LUT 1-1 61, LUT1-2 62, and LUT1-3 63”, column 7, line 33-37).

Official Action, pages 4-5.

As amended, claim 20 recites “color point correction system comprises *a plurality of multiplication look-up tables (MLUTs) associated with a plurality of pre-calculated gamut shifting arrays to compensate for color point data at substantially full video rate,*” as recited in claim 20. (Emphasis added). The Oku reference fails to disclose the claimed subject matter.

The Oku reference describes an image recording apparatus for correcting color of image signals. See Oku, col. 2, lines 38-52. The image recording apparatus of Oku utilizes a table to prevent the use of large amounts of memory. See Oku, col. 2, lines 12-20. Accordingly, in the Oku reference, a first color correction unit 37, a second color correction unit 44 and a third color correction unit 48 are components of a color correction processor 22.

*See id.* at Fig. 5. The first color correction unit 37 and third color correction unit 48 utilize LUTs to normalize the image signals. *See id.* at col. 7, lines 25-30; col. 13, line 58 to col. 14, line 4. The second color correction unit 44 nonlinearly maps the combination of the input signals, as set forth in the following passage:

The second color correction unit 44 nonlinearly maps the combination of the input signals R', G', and B' (38), (39), and (40) to the combination of the output signals R'', G'', and B'' 45, 46, and 47 by using a three-dimensional LUT in order that the gradation and the color reproduction on the color CRT screen are visually equivalent to those of the printed picture. The principle of the mapping will first be described.

Oku, col. 9 lines 56-63.

In this passage, the Oku reference describes utilizing a three-dimensional LUT to correct the color to be equivalent to those of the printed picture. Then, once the three-dimensional matrix is applied, the image signals are again normalized.

In the rejection, the Oku reference fails to anticipate the claimed subject matter for at least two reasons. First, the Examiner's construction fails to disclose the claimed subject matter. Secondly, the Oku reference at least does not disclose a "color point correction system comprises *a plurality of multiplication look-up tables (MLUTs) associated with a plurality of pre-calculated gamut shifting arrays to compensate for color point data at substantially full video rate,*" as recited in claim 20. (Emphasis added). Hence, the Oku reference fails to anticipate the claims.

With regard to the first point, the Examiner's construction fails to disclose the claimed subject matter. Specifically, in the rejection, the Examiner asserted that the first color correction unit 37 of Oku corresponds to the "color filter" of the claims, and the second color



correction unit 44 of Oku corresponds to the “color point correction system” of the claims. Further, in the rejection of claim 22, the Examiner asserted that the LUTs 61, 62 and 63 of the input data normalizing unit 56 corresponds to “the plurality of multiplication look-up tables” of the claims. However, the input data normalizing unit 56 of Oku is part of the first color correction unit 37. Accordingly, because the first color correction unit 37 of Oku is analogized to the “color filter” of the claims, the LUTs 61, 62 and 63 of the input data normalizing unit 56 would more correctly be analogized to the “color filter,” not the “color point correction system” of the claims. As such, the Examiner’s proposed construction does not correctly contemplate the “color point correction system comprises a plurality of multiplication look-up tables (MLUTs) associated with a plurality of pre-calculated gamut shifting arrays to compensate for color point data at substantially full video rate,” as recited in claim 20.

Secondly, the Oku reference at least does not disclose “color point correction system comprises a plurality of multiplication look-up tables (MLUTs) associated with a plurality of pre-calculated gamut shifting arrays to compensate for color point data at substantially full video rate,” as recited in claim 20. (Emphasis added). The “plurality of multiplication look-up tables (MLUT),” as recited in claim 20, is not disclosed in the second color correction unit 44 of Oku. In Oku, the second color correction unit 44 describes a three-dimensional matrix that is utilized to associate weights to provide color reproduction that is visually equivalent to a printed picture. *See* Oku, col. 9, lines 56-63. The reference is silent with respect to the multiplication operations within look-up tables that are associated with pre-calculated gamut shifting arrays to compensate for color point data at substantially full video rate. Because Oku does not teach, suggest or illustrate the use of MLUTs to compensate for color point data

at substantially full video rate with specific multiplication operations, it fails to anticipate the claimed subject matter.

For at least these reasons, Oku cannot anticipate independent claim 20 and dependent claims 21 and 23-25 under existing law. Accordingly, the Applicant respectfully requests withdrawal of the rejection of claims 20-21 and 23-25 under Section 102 based on Oku.

### **Rejection Under 35 U.S.C. § 103 based on Oku and Ijntema**

The Examiner rejected claims 1-2, 5, 7-9, 13 and 14 under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Oku. Specifically, with regard to independent claims 1 and 8, the Examiner stated:

As per claim 1, Ijntema et al., hereinafter Ijntema, discloses a hardware-implemented color video correction filtering system, comprising:

- a plurality of linearization table to gamma decompensate input color video data referenced to a non-linear color space (“To fully compensate the color errors, the RGB signals have to be linearized by compensating for the gamma correction applied in the camera”, column 2, line 31-34; “The characteristics could be stored in a LUT”, column 2, line 59);

- a plurality of a set of pre-calculated gamut shifting arrays to compensate for color point data of a plurality of constituent colors of a color monitor with each set of pre-calculated gamut shifting arrays corresponding to a multiplication look-up table (MLUT) comprising pre-calculated values that represent specific multiplication operations, each set of pre-calculated gamut shifting arrays coupled to one linearization table of the plurality of linearization tables (“a transformation of the RGB signals with a 3x3 matrix can be done”, column 2, line 34, since a matrix operation includes both multiplication and addition operations, it represents a specific multiplication operation);

- and a plurality of non-linearization tables coupled to the plurality of hardware adders to compensate for non-linearities of the color monitor and produce output color video data compensated for non-linearities and color points of the color monitor (“Finally, the gamma correction has to be applied

again”, column 2, line 36; “The characteristics could be stored in a LUT”, column 2, line 59).

Ijntema discloses a color correction system. Ijntema further discloses a matrix for compensating color. It is noted that Ijntema does not explicitly disclose a plurality of shifting array and hardware adders coupled to one of the pre-calculated shifting arrays, however, this is known in the art as taught by Oku. Oku discloses a color correcting system in which the color adjusting matrix is built with a plurality of look-up tables and adders (“The hardware of the first color correction unit may be constructed as shown in FIG. 9. As shown, the three look-up tables 61, 62 and 63 of the input normalizing unit and the linear matrix calculator 57 are constructed with a total of nine look-up tables 64 60 72 and three adders 3, 74 and 75”, column 9, line 25-30).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Oku into Ijntema because Ijntema discloses a system for color correction with matrix for color compensation and Oku discloses the matrix used for color compensation can be constructed with plurality of look up table and adders in order to accelerate the processing speed.

15. As per claim 8, Ijntema discloses a computer system, comprising:
  - a processor (Figure 1 C);
  - video memory coupled to the processor (since LUT could be used in digital implementation (column 2, line 55-60), it is inherent that memory is used to store LUT); and
  - a color video data correction filtering system coupled to the processor, the system comprising:
    - a plurality of linearization table to gamma decompensate input color video data referenced to a non-linear color space (“To fully compensate the color errors, the RGB signals have to linearized by compensating for the gamma correction applied in the camera”, column 2, line 31-34; “The characteristics could be stored in a LUT”, column 2, line 59);
    - a plurality of a set of pre-calculated gamut shifting arrays to compensate for color point data of a plurality of constituent colors of a color monitor with each of the plurality of pre-calculated gamut shifting arrays corresponding to a multiplication look-up table (MLUT) comprising pre-calculated values that represent specific multiplication operations, each set of pre-calculated gamut shifting arrays coupled to one linearization table of the plurality of linearization tables (“a transformation of the RGB signals with a 3x3 matrix can be done”, column 2, line 34, since a matrix operation includes both multiplication and addition operations, it represents a specific multiplication operation);

a plurality of non-linearization table coupled to the plurality of hardware adders to compensate for non-linearities of the color monitor and produce output color video data compensated for non-linearities and color point of the color monitor (“Finally, the gamma correction has to be applied again”, column 2, line 36; “The characteristics could be stored in a LUT”, column 2, line 59).

Ijntema discloses a color correction system. Ijntema further discloses a matrix for compensating color. It is noted that Ijntema does not explicitly disclose a plurality of shifting array and hardware adders coupled to one of the pre-calculated shifting arrays, however, this is known in the art as taught by Oku et al., hereinafter Oku. Oku discloses a color correcting system in which the color adjusting matrix is built with a plurality of look-up tables and adders (“The hardware of the first color correction unit may be constructed as shown in FIG. 9. As shown, the three look-up tables 61, 62 and 63 of the input normalizing unit and the linear matrix calculator 57 are constructed with a total of nine look-up tables 64 60 72 and three adders 3, 74 and 75”, column 9, line 25-30).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Oku into Ijntema because Ijntema discloses a system for color correction with matrix for color compensation and Oku discloses the matrix used for color compensation can be constructed with a plurality of look-up table and adders in order to accelerate the processing speed.

Official Action, pages 6-9.

The Applicant respectfully traverses these rejections. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the

references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

In the rejection, the Examiner asserted that Ijntema and Oku disclosed all of the claimed subject matter of the claims. Specifically, to reject these claims, the Examiner asserted that the Ijntema reference discloses all the claimed subject matter except that the Ijntema reference does not explicitly disclose a plurality of shifting array and hardware adders coupled to one of the pre-calculated shifting arrays. In an attempt to remedy the deficiencies, the Examiner relied on the Oku reference. However, the rejection of claims 1-2, 5, 7-9, 13 and 14 under Section 103 is defective at least because of the shortcomings discussed above regarding the Ijntema reference and the Oku reference. Specifically, independent claims 1 and 8 recite “a plurality of a set of pre-calculated gamut shifting arrays to compensate for color point data of a plurality of constituent colors of a color monitor with each set of pre-calculated gamut shifting arrays corresponding to a multiplication look-up table (MLUT)

comprising pre-calculated values that represent specific multiplication operations, each set of pre-calculated gamut shifting arrays coupled to one linearization table of the plurality of linearization tables.” These limitations are similar to the previously-discussed limitations set forth in independent claims 15 and 20. Accordingly, because of the shortcomings of the Ijntema and Oku references, alone or in combination, no combination of Ijntema and Oku with any of the other references cited by the Examiner can possibly contain each and every element set forth in the claims.

With regard to the Ijntema reference, it does not disclose or suggest the use of multiplication look-up tables (MLUTs), as recited in claims 1 and 8. In the rejection, the Examiner again appears to assert that the 3x3 matrix of Ijntema corresponds to the “multiplication look-up tables” of the present claims. Furthering this point, the Examiner stated that “since a matrix operation includes both multiplication and addition operations, it represents a specific multiplication operation,” which appears to imply that multiplication operations are inherent. However, Ijntema does not teach, suggest or illustrate the use of MLUTs, much less, storing pre-calculated values that represent specific multiplication operations because the reference is completely silent with respect to the calculation of the values in its look up tables. In addition, the Examiner’s unsupported assertions about the 3x3 matrix of Ijntema does not provide a basis in fact and/or sound and supportable technical reasoning to support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the Ijntema reference. That is, the Examiner has not satisfied the evidentiary burden required by the binding precedents cited above. As such, the “multiplication look-up table (MLUT),” as recited in claims 1 and 8, are not explicitly or inherently found in the Ijntema reference.

While the Examiner does not rely upon the Oku reference, it does not disclose or suggest the use of multiplication look-up tables (MLUTs, as recited in claims 1 and 8. As discussed above, the Oku reference is silent with respect to the *a plurality of multiplication look-up tables (MLUTs) associated with a plurality of pre-calculated gamut shifting arrays*. Indeed, the Examiner does not even assert that the missing elements are provided by the Oku reference. As a result, the Oku reference fails to cure the deficiencies of the Ijntema reference.

For at least these reasons, the Applicant respectfully asserts that the rejection of claims 1-2, 5, 7-9, 13 and 14 under Section 103 is improper. Accordingly, the Applicant respectfully requests withdrawal of the rejection and allowance of the claims 1-2, 5, 7-9, 13 and 14.

#### **Other Rejections Under 35 U.S.C. § 103**

The Examiner rejected claims 3, 6, 10, 11, 16 and 17 under 35 U.S.C. § 103(a) as obvious. Claims 3 and 11 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Oku and Wilt. Claims 6 and 10 were rejected under Section 103 based on Ijntema in view of Oku and Shelton. Claim 16 was rejected under Section 103 based on Ijntema in view of Shelton. Finally, claim 17 was rejected under 35 U.S.C. § 103(a) as being rendered obvious by Ijntema in view of Wilt. The text of these rejections is set forth below.

With respect to the rejection of claims 3 and 11, the Examiner stated:

As per claims 3 and 11, Ijntema and Oku demonstrated all the elements as applied to the rejection of independent claims 1 and 8, *supra*, respectively.

Ijntema and Oku disclose a system of color correction for a CRT. It is noted that Ijntema and Oku do not explicitly disclose the CRT (which is a non-linear display device) has sRGB color space, however, this is known in the art as taught

by Wilt et al., hereinafter Wilt. Wilt discloses a color conversion method using non-linear sRGB color space ([0005]).

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Wilt into Ijntema and Oku because Ijntema and Oku disclose a system of correcting color relating to a CRT (which has non-linear color space) and Wilt discloses a color correcting system using non-linear sRGB space in order to extend the correction method to displays, scanners and digital camera ([0005]).

Official Action, page 11.

With respect to the rejection of claims 6 and 10, the Examiner stated:

As per claims 6 and 10, Ijntema and Oku demonstrated all the elements as applied to the rejection of independent claims 1 and 8, supra, respectively.

Ijntema discloses a system of color correction which could be applied to TV sets and computers monitors (column 3, line 18-19). It is noted that Ijntema does not explicitly disclose the input color video data is input from a website, however, this is known in the art as taught by Shelton. Shelton discloses a color correction method in which color data can be transmitted from a website (Figure 2 18).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shelton into Ijntema and Oku because Ijntema and Oku disclose a system of color correction a pluralities of monitor and Shelton discloses the color data could be transmitted from a website in order to correct a plurality of remotely located monitor.

Official Action, page 13.

Further, with respect to the rejection of claim 16, the Examiner stated:

As per claim 16, Ijntema demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Ijntema discloses a method of color correction which could be applied to TV sets and computer monitors (column 3, line 18-19). It is noted that Ijntema does not explicitly disclose the input color video data is input from a website, however, this is known in the art as taught by Shelton. Shelton discloses a color correction method in which data can be transmitted from a website (Figure 2 18).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate



the teaching of Shelton into Ijntema because Ijntema discloses a method of color correction a pluralities of monitor and Shelton discloses the color data could be transmitted from a website in order to correct a plurality of remotely located monitor.

Official Action, pages 13-14.

Finally, with respect to the rejection of claim 17, the Examiner stated:

As per claim 17, Ijntema demonstrated all the elements as applied to the rejection of independent claim 15, supra.

Ijntema discloses a method of color correction for a CRT. It is noted that Ijntema does not explicitly disclose the CRT (which is non-linear display device) has sRGB color space, however, this is known in the art as taught by Wilt et al., hereinafter Wilt. Wilt discloses a color conversion method using non-linear sRGB color space ([0005]).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Wilt into Ijntema because Ijntema discloses a method of correcting color relating to a CRT (which has non-linear color space) and Wilt discloses a color correcting method using non-linear sRGB space in order to extend the correction method to displays, scanners and digital cameras ([0005]).

Official Action, pages 14-15.

The Applicant respectfully traverses these rejections.

With regard to claims 3, 6, 10 and 11, claim 3 and 6 depend from independent claim 1 and claims 10 and 11 depend from independent claim 8. The rejections of claims 3, 6, 10 and 11 under Section 103 is defective at least because of the shortcomings of the Ijntema and Oku references that are discussed above with respect to the rejection of independent claims 1 and 8 under Sections 102 and 103. Specifically, Ijntema and Oku are missing elements recited in independent claims 1 and 8, and those elements are not supplied by the references relied upon by the Examiner. Indeed, the Examiner does not even assert that the missing elements are provided by the additional references. As such, the additional references do not cure the deficiencies of the Ijntema and Oku references.

Furthermore, claims 16 and 17 depend from independent claim 15. The rejections of claims 16 and 17 are improper for at least the reasons set forth above with respect to the rejection of independent claim 15 under Section 102 based on Ijntema. Specifically, Ijntema is missing elements recited in independent claim 15 and those elements are not supplied by the references relied upon by the Examiner. In fact, the Examiner does not even assert that the missing elements are provided by the additional references. As such, the additional references do not cure the deficiencies of the Ijntema reference.

For at least these reasons, the Applicant respectfully asserts that the rejection of claims 3, 6, 10, 11, 16 and 17 under Section 103 is improper. Accordingly, the Applicant respectfully requests withdrawal of the rejection and allowance of claims 3, 6, 10, 11, 16 and 17.

**Conclusion**

In view of the remarks set forth above, the Applicant respectfully requests withdrawal of all of the Examiner's rejections. Furthermore, the Applicant asserts that an indication of the allowability of claims 1-3, 5-11, 13-17, 19-21 and 23-25 is appropriate. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: AUGUST 17, 2004

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